CENSUS OF FATAL OCCUPATIONAL INJURIES New Jersey - 1998

NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES

IN COOPERATION WITH THE U.S. DEPARTMENT OF LABOR BUREAU OF LABOR STATISTICS

January 2000

Census of Fatal Occupational Injuries Project

Written by Emily O'Hagan Smith Occupational Health Surveillance Program

James S. Blumenstock, Senior Assistant Commissioner Public Health Protection and Prevention Programs

Eddy A. Bresnitz, M.D., M.S., State Epidemiologist/Assistant Commissioner
Kathleen O'Leary, Director
Occupational Health Service
Division of Epidemiology, Environmental and Occupational Health
P.O. Box 360
Trenton, NJ 08625-0360
Phone (609) 984-1863

Census of Fatal Occupational Injuries Staff Noreen M. Rooks Emily O'Hagan Smith

This document is available on the Internet at: www.state.nj.us/health/eoh/survweb/

FOREWORD

The Census of Fatal Occupational Injuries (CFOI) Project is a cooperative effort between the federal government and state governments. It was initiated in 1990 by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data is collected from 50 states and U.S. territories. The impetus for the CFOI project was the lack of a true count of occupational injury fatalities. Estimates of the number of fatal injuries varied widely due to different reporting sources and definitions. CFOI's objective is to collect detailed information on every occupational injury fatality in a timely manner leading to appropriate prevention programs. The national data file is available to researchers from the Bureau of Labor Statistics.

The BLS provides funding to the states that is matched by the states. The states actively collect, verify, code, computerize, and transmit to BLS detailed information on work-related fatal injuries. Coding is done according to the BLS protocol. Identifying information such as workers' names, employers' names, and company names are not sent to BLS. In New Jersey, the CFOI project is conducted by the Occupational Health Service within the New Jersey Department of Health and Senior Services.

In this publication, totals of some categories may not be the same as those published by the BLS for New Jersey. Differences may be due to grouping of information.

TABLE OF CONTENTS

Highlights	Page	1
Data Specifications and Sources	Page	2
Demographic Characteristics	Page	3
Industry	Page	4
Occupation	Page	5
External Cause of Injury	Page	6
Event or Exposure	Page	7
Source of Injury	Page	8
Worker Activity	Page	9
Worker Location	Page	10
Years 1991 through 1998	Page	11

- ► total number of fatal injuries: 103
- ► 2.57 fatalities per 100,000 workers
- ▶ 95 were men and 8 were women
- ▶ 24% were foreign-born workers
- ► 77% were residents of New Jersey
- age at death ranged from 18 to 79, average age was 43, 60% were younger than 45 years of age
- ▶ 82 worked for wages or salary, 17 were self-employed, 4 were in other categories
- ▶ 97 worked in the private sector, 6 were public employees
- The highest number of fatalities occurred in the industries of transportation and public utilities (29), construction (24) and services (14).
- The highest number of fatalities occurred in the occupations of transportation and material moving (35) and construction trades (19).
- The most common external cause of injuries (E-codes) included motor vehicle traffic accidents (27), falls (14), and homicides (13).
- A total of 2,266 potential years of work life (the total number of years before age 65 of all the victims) was lost, an average of 24 years per fatality
- The percent of fatal injuries occurring by company size was: 1-10 employees, 49%; 11-19 employees, 11%; and over 100 employees, 20%.

DATA SPECIFICATIONS

The following individuals are included:

- O Private and public sector employees
- O Self-employed persons
- O Certain volunteers (e.g., firefighters, law enforcement officers, emergency medical service workers)
- O Persons traveling on the job, but not commuting to or from the job
- O Institutionalized persons who are fatally injured while employed off the premises of their institutions.

All work-related fatal injuries that occurred in New Jersey in 1998 were counted in this report, including homicides, suicides, and motor vehicle accidents. Only deaths due to an injury are included; deaths due to an occupational illness are not included. A death is considered work-related if the event leading to the fatal injury occurred while the employee was working, either on or off the employer's premises. Fatal occupational injuries are classified according to the Bureau of Labor Statistics' protocol. The coding systems used are listed in footnotes to the tables in this report.

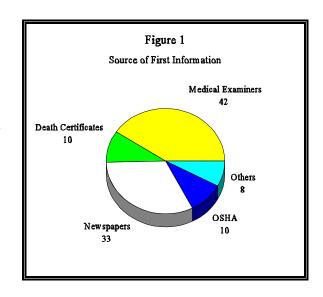
An occupational injury is defined as a wound or other condition caused by external forces or caused by a specific event or incident or series of events within a single

work day. Work-related injuries listed as an underlying or contributory cause on the death certificate or medical examiner's report are included. An example is a death that was caused by pneumonia after the worker was hospitalized with injuries that occurred at work.

SOURCES OF INFORMATION

The work relationship of each fatality is confirmed by at least two sources. Sources and documents used are newspaper articles, medical examiner reports, police reports, NJ Fatality Assessment and Control Evaluation (FACE) reports, and other state and federal agency reports. A follow back questionnaire is sent to employers or other knowledgeable persons, when needed, to gather additional information.

Figure 1 shows that documents received from the county and state medical examiners were the major source of initial information about the fatal injuries, followed by newspapers.



DEMOGRAPHIC CHARACTERISTICS

Numbers

Table 1 shows the employer, employment status, gender, race and age of the 103 victims of fatal work-related injuries in New Jersey in 1998. Seventeen percent of the victims were self-employed and 6% were government employees. Most of the victims were male (92%) and their ages ranged from 18 to 79 with 60% younger than 45 years of age.

TABLE 1
Fatal Occupational Injuries by Selected Demographic Characteristics, New Jersey, 1998

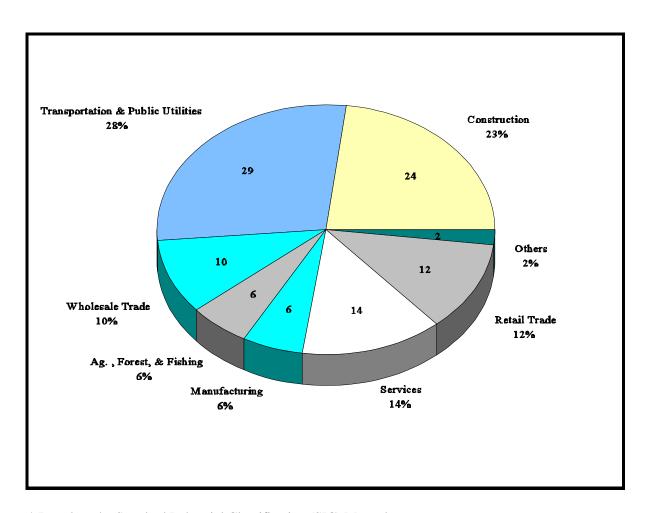
CHARACTERISTIC	NUMBER	PERCENT
TOTAL	103	100
Employer		
Private	97	94
Local, County, Federal Gov.	6	6
Employment Status		
Wage and Salary Workers	82	80
Self-Employed	17	17
Others	4	3
Gender		
Men	95	92
Women	8	8
Race		
White	74	72
Black	18	17
Asian or Pacific Islander	6	6
Unknown	5	5
Age		
19 years and under	4	4
20 to 24 years	6	6
25 to 34 years	21	20
35 to 44 years	31	30
45 to 54 years	14	14
55 to 64 years	18	17
65 years and older	9	9

Not all categories are shown. Note: Percentages may not add to 100 due to rounding.

INDUSTRY

The highest number of fatal injuries occurred in transportation and public utilities (29) and construction (24).

FIGURE 2
Fatal Occupational Injuries by Industry*
New Jersey, 1998 (N=103)



^{*} Based on the Standard Industrial Classification (SIC) Manual

Includes workers employed in government with a SIC in other industries - 3 in transportation and public utilities, 1 in services, and 1 in construction.

OCCUPATION

TABLE 2
Fatal Occupational Injuries by Occupation
New Jersey, 1998 (N=103)

OCCUPATION*	NUMBER**	PERCENT
Transportation and Material Moving	35	34
Truck drivers	20	
Industrial truck and tractor equipment operators	3	
Construction Trades	19	18
Carpenters and apprentices	7	
Handlers, Equipment Cleaners, Helpers, and Laborers	17	17
Laborers except construction	6	
Construction laborers	3	
Sales Occupations	7	7
Farming, Forestry, Fishing	6	6
Mechanics and Repairers	4	4
Executive, Administrative, and Managerial	4	4
Machine Operators and Tenders	3	3
Professional Specialty	3	3
Others	5	5
All Occupations	103	100

^{*}Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

^{**} Subcategories may not total major categories. Not all subcategories are shown.

EXTERNAL CAUSE OF INJURY

E-codes classify the environmental events, circumstances, and conditions as the cause of the injury, poisoning, and other adverse effects.

TABLE 3
Fatal Occupational Injuries by Cause
New Jersey, 1998 (N=103)

EXTERNAL CAUSE OF INJURY*	NUMBER**	PERCENT
Motor Vehicle Traffic Accidents (MVTA)	27	26
Involving collision with motor vehicle	12	
Involving collision with pedestrian	6	
Involving collision with other than vehicle	7	
Motor Vehicle Nontraffic Accidents	8	8
Involving collision with pedestrian	6	
Railway Accident	2	
Accidental Falls	14	14
Falls from or out of building or other structure	5	
Falls from ladders	4	
Accidents Caused by Machinery	12	12
Lifting machines and appliances	6	
Homicides	13	13
Assault by firearms	6	
Accidents Caused by Electric Current	7	7
Struck Accidentally by Falling Objects	6	6
Caught Accidently in or Between Objects	3	3
Other	11	11
All External Cause of Injuries	103	100

^{*}Based on the International Classification of Disease, 9th Edition, External Injury Codes (ICD-9 E-Codes).

^{**} Subcategories may not total major categories. Not all subcategories are shown.

EVENT OR EXPOSURE

The event or exposure describes the manner in which the injury or illness was produced or inflicted by the source of the injury or illness.

TABLE 4
Fatal Occupational Injuries By Event or Exposure
New Jersey, 1998 (N=103)

EVENT OR EXPOSURE*	NUMBER**	PERCENT		
Transportation Incidents	44	43		
Highway accident	21			
Vehicle struck vehicle, mobile equipment	12			
Nonhighway accident except rail, air, water	9			
Worker struck by vehicle, mobile equipment	12			
in roadway	6			
in parking lot or non-roadway area	6			
Contact with Objects and Equipment	20	19		
Struck by object	12			
Caught in or compressed by equipment or objects	5			
Falls	14	14		
From a ladder	4			
From a roof	4			
Assaults and Violent Acts	14	14		
Homicides	13			
Shooting	6			
Exposure to Harmful Substances or Environments	8	8		
Contact with electric current	8			
Fires and Explosions	3	3		
All Events or Exposures	103	100		
* Based on the 1992 Occupational Injury and Illness Classification Structures				

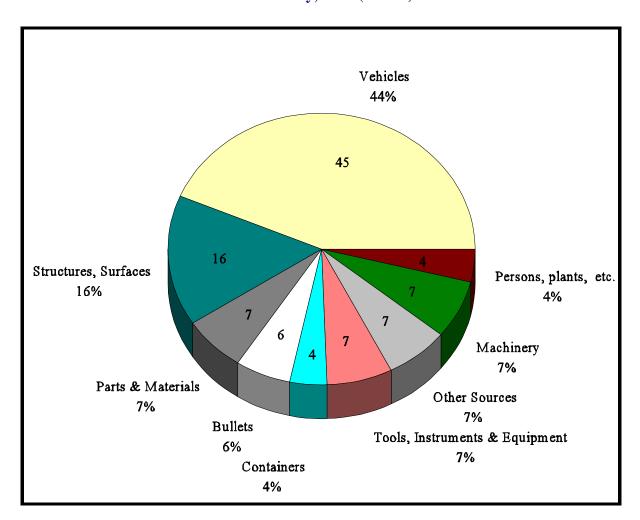
^{**} Subcategories may not total major categories. Not all subcategories are shown.

SOURCE OF INJURY

The sources (i.e., the objects, substances, exposures, or bodily motions that directly produced the injury) of the 103 fatal injuries are shown in Figure 3.

Forty-four percent of all work-related fatalities involved vehicles. The vehicles included 7 vans, 8 autos, 19 trucks (including 8 tractor trailers) and 6 forklift trucks, Sixteen percent of the sources were structures and surfaces, including 5 floors and 5 ground surfaces.

FIGURE 3
Fatal Occupational Injuries By Source of Injury*
New Jersey, 1998 (N=103)



^{*} Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

WORKER ACTIVITY

Table 5 indicates the activity of the worker at the time of occurrence of the 103 fatal injuries. The most common activities were vehicular and transportation operations (41%), including driving or operating a vehicle (30%), and constructing, repairing, and cleaning (28%).

TABLE 5
Fatal Occupational Injuries by Worker Activity
New Jersey, 1998 (N=103)

WORKER ACTIVITY*	NUMBER**	PERCENT
Vehicular and Transportation Operations	42	41
Driving or operating	31	
Truck	12	
Automobile	5	
Industrial vehicle	6	
Walking in or near the roadway	4	
Boarding or alighting	3	
Constructing, repairing, cleaning	27	26
Installing	7	
Material Handling Operations	7	7
Physical Activities	4	4
Using, Operating Tools or Machinery	9	9
Other Activities	12	12
Tending a retail establishment	7	
Office work	5	
Activity Unspecified or Unknown	2	2
All Activities	103	100

^{*} Based on activity codes developed by the U.S. Department of Labor, Bureau of Labor Statistics.

^{**} Subcategories may not total major categories. Not all subcategories are shown.

LOCATION

Table 6 shows the location of the 103 workers at the time of their injury. Most of the workers were working at industrial places (40%) or on streets or highways (29%). Eighteen workers were killed at construction sites: general construction 15, home construction 2, and road construction 1.

TABLE 6 Fatal Occupational Injuries by Location of the Worker New Jersey, 1998 (N=103)

WORKER'S LOCATION*	NUMBER**	PERCENT
Industrial Places and Premises	41	40
Construction site	15	
Factory, plant	6	
Industrial yard	5	
Warehouse	4	
Street or Highway	30	29
Local road or street	19	
Limited access roads	8	
Road construction	1	
Public Building	12	12
Restaurant, café	4	
Other commercial store	5	
Home***	9	9
Home construction	2	
Other Places	9	9
Parking lot	3	
Other Category or Unknown	2	2
All Locations	103	100

^{*} Based on location codes developed by the U.S. Department of Labor, Bureau of Labor Statistics.

^{**} Subcategories may not total major categories. Not all subcategories are shown.
*** Home construction has been coded under Home and not under Industrial Places and

Premises, Construction Sites, since 1996.

YEARS 1991 - 1998

TABLE 7
Fatal Occupational Injuries by External Cause of Injury (ICD-9 E-Codes)
New Jersey 1991 - 1998

Number of Fatal Injuries

ICD-9 E-Codes	1991	1992	1993	1994	1995	1996	1997	1998
Total	133 ¹	139 ²	145 ³	114	118	100 ⁴	101	103
Transportation	34	43	55	33	36	40	28	38
Motor vehicle traffic accidents	27	37	39	25	32	27	18	27
Motor vehicle non-traffic accidents	3	3	4	4	1	6	5	8
Water transport accidents	2	1	7	0	1	3	2	1
Railway accidents	2	0	2	0	0	3	1	2
Air transport accidents	0	2	3	4	2	1	2	0
Homicides and Injuries Purposely Inflicted by Others	31	29	20	22	25	145	15	13
Suicides	5	8	5	2	2	7	3	1
Accidental Falls	16	16	27	13	14	7	16	14
Accidents Caused by Electric Current	14	6	7	8	5	6	9	7
Accidents Caused by Machinery	12	17	10	15	9	8	8	12

¹Original Census 106, revised to 112. An additional 21 fatal injuries were added after close of the year.

Note: Only major categories of causes of injury are shown.

² Original Census 114, revised to 138. One additional fatal injury was added after close of the year.

³Original Census 142, revised to 145.

⁴Original Census 99, revised to 100.

⁵ Original count of homicides was 13. One additional homicide was added during revision.